

--(ii) recovering the multispecific antibody from the host cell culture.--

Please replace the paragraph beginning at page 17, line 16 with the following rewritten paragraph:

--Figs. 2A-2C. Fig. 2A diagrams a selection scheme for C<sub>3</sub> heterodimer using phage display vector, pRA2. Phage displaying stable C<sub>3</sub> heterodimers are captured using an antibody directed to the gD flag. Fig. 2B diagrams a dicistronic operon in which C<sub>3</sub> expressed from a synthetic gene is co-secreted with a second copy of C<sub>3</sub> expressed from the natural gene (Ellison et al. Nucleic Acids Res. 10:4071-4079 (1982)) as a fusion protein with M13 gene III protein. The synthetic C<sub>3</sub> gene is preceded by a sequence encoding a peptide derived from herpes simplex virus glycoprotein D (gD flag, Lasky, L. A. and Dowbenko, D. J. (1984) DNA 3:23-19; Berman, P. W. et al., (1985) Science 227:1490-1492 and a cleavage (G) site for the site-specific protease, Genenase I (Carter, P. et al. (1989) Proteins: Structure, Function and Genetics 6:240-248). Fig. 2C is the nucleic acid sequence of the dicistronic operon (SEQ ID NO:13) of Fig. 2B in which the residues in the translated C<sub>3</sub> genes are numbered according to the Eu system of Kabat et al. In Sequences of Proteins of Immunological Interest, 5th ed. vol. 1, pp. 688-696, N.H. Bethesda, MD (1991). Protuberance mutation T366W is shown, as are the residues targeted for randomization in the natural C<sub>3</sub> gene (366, 368, and 407).--

Please replace the paragraph beginning at page 96, line 8 with the following rewritten paragraph:

--A large human single chain Fv (scFv) antibody library

ECD), IgE (murine IgE), IgE-F (human IgE receptor  $\alpha$ -chain), MPL (human thrombopoietin receptor tyrosine kinase ECD), MusK (human muscle specific receptor tyrosine kinase ECD), NpoF (human orphan receptor NpoR ECD), Rse (human receptor tyrosine kinase, Rse, ECD), HER3 (human receptor tyrosine kinase HER3/c-erbB3 ECD), Ob-R (human leptin receptor ECD), and VEGF (human vascular endothelial growth factor) where ECD refers to the extracellular domain. The nucleotide sequence data for scFv fragments from populations of antibodies raised to each antigen was translated to derive corresponding protein sequences. The  $V_L$  sequences were then compared using the program "align" with the algorithm of Feng and Doolittle (1985, 1987, 1990) to calculate the percentage identity between all pairwise combinations of chains (Feng, D.F. and Doolittle, F.F. (1985) J. Mol. Evol. 21:112-123; Feng, D.F. and Doolittle, F.F. (1987) J. Mol. Evol. 25:351-360; and Feng, D.F. and Doolittle, F.F. (1990) Methods Enzymol. 183:375-387). The percent sequence identity results of each pairwise light chain amino acid sequence comparison were arranged in matrix format (Table 6.1-6.15).

On page 107, after line 29 and before line 30, insert Table 6.1-6.15:

[illegible]

TABLE 6.1

41	Mpl.16
42	Mpl.19
43	Mpl.21
44	Mpl.24
45	Mpl.26
46	Mpl.28
47	Mpl.29
48	Mpl.30
49	Mpl.31
50	Mpl.32
51	Mpl.33
52	Mpl.35
53	MusK.01
54	MusK.02
55	MusK.06
56	NpoR.25
57	NpoR.44
58	NpoR.53
59	NpoR.81
60	NpoR.86
61	Rse.01
62	Rse.02
63	Rse.03
64	Rse.04
65	Rse.07
66	Rse.08
67	Rse.15
68	Rse.16
69	Rse.18
70	Rse.20
71	Rse.21
72	Rse.22
73	Rse.23
74	Rse.24
75	Rse.52
76	Rse.53
77	Rse.58
78	Rse.60
79	Rse.61
80	Rse.63
81	her3.1
82	her3.10

TABLE 6.2



NE	KE	30	31	32	33	34	35	36	37	38	MPL	40	41	42	43	44	45	46	47	48	49	50	51
24	25	9	46	44	46	79	50	100	51	49	79	81	81	49	80	80	50	80	43	45	46	47	47
44	45	1	58	57	57	47	66	50	76	68	48	43	48	68	47	48	70	48	65	72	73	69	63
59	60	3	60	59	59	48	68	50	77	70	49	44	49	70	48	49	72	49	66	74	75	70	65
61	62	4	46	42	45	83	48	81	50	46	83	100	100	45	84	83	47	99	45	46	47	47	44
44	45	5	48	45	48	78	53	83	55	52	78	76	82	51	78	78	53	82	49	48	49	50	51
48	49	6	45	43	44	98	47	79	48	47	94	95	83	46	99	99	48	82	43	46	47	45	46
43	44	7	50	47	49	78	53	83	53	52	78	75	83	51	79	78	53	83	47	48	49	49	50
48	49	8	57	55	56	48	62	47	74	64	47	44	48	65	48	49	63	48	73	80	80	76	60
58	59	9	62	58	61	48	64	50	78	68	48	44	49	68	47	48	65	49	68	74	75	72	61
63	64	10	60	57	59	47	79	50	66	84	48	43	46	83	47	48	97	46	61	65	66	65	79
61	62	11	47	45	47	85	49	90	52	48	83	84	85	47	85	86	49	85	45	47	48	49	47
45	46	12	61	56	60	47	74	46	62	75	47	43	45	75	47	48	85	45	60	61	62	64	72
62	63	13	47	45	43	44	99	47	80	48	47	95	84	46	100	100	48	83	43	46	47	45	48
43	44	14	57	54	56	44	75	47	63	79	45	41	44	79	44	45	92	44	57	60	61	61	74
58	59	15	61	58	60	47	76	49	67	79	48	43	48	79	47	48	89	48	62	64	65	65	74
62	63	16	97	87	98	42	71	43	65	57	42	38	42	60	42	42	59	42	52	57	58	59	55
98	99	17	90	97	91	42	66	44	64	55	42	38	42	42	57	42	58	42	51	57	58	57	52
91	92	18	99	88	100	43	72	45	67	59	44	40	44	44	62	43	44	61	44	54	59	60	61
100	101	19	60	57	59	47	79	50	66	84	48	43	46	83	47	48	97	46	61	65	66	65	79
61	62	20	60	59	59	48	68	50	77	70	49	44	49	70	48	49	71	49	66	73	74	70	65
60	61	21	60	59	59	48	68	50	77	70	49	44	49	70	48	49	72	49	66	74	75	70	65
61	62	22	45	41	44	81	47	79	49	45	81	78	98	97	44	82	81	46	97	44	45	46	43
43	44	23	60	57	59	49	74	50	67	78	50	45	48	79	49	50	93	48	64	70	70	68	73
61	62	24	60	57	59	49	74	50	67	78	50	45	48	79	49	50	93	48	64	70	70	68	73
61	62	25	99	88	100	43	72	45	67	59	44	40	44	62	43	44	61	44	54	59	60	61	57
47	48	26	45	43	44	98	47	80	48	47	94	95	84	83	46	99	48	83	43	46	47	45	46
61	62	27	99	88	100	43	72	45	67	59	44	40	44	62	43	44	61	44	54	59	60	61	57
43	44	28	99	88	100	43	72	45	67	59	44	40	44	62	43	44	61	44	54	59	60	61	57
61	62	29	60	55	59	48	85	49	65	94	48	44	46	46	93	48	49	78	46	58	60	61	99
60	61	30	60	55	59	48	85	49	65	94	48	44	46	46	93	48	49	78	46	58	60	61	99
60	61	31	98	87	99	43	71	45	67	58	44	40	44	44	61	43	44	60	44	53	58	59	60
60	61	32	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	33	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	34	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	35	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	36	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	37	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	38	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	39	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	40	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	41	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	42	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	43	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	44	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	45	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	46	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	47	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	48	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	49	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	50	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	51	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	52	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	53	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	54	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	55	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	56	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	57	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	58	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	59	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	60	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	61	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	62	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	63	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	64	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	65	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	66	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	67	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	68	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	69	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	70	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65
61	62	71	60	57	59	47	79	50	66	84	48	43	46	46	83	47	48	97	46	61	65	66	65

TABLE 6.4

[illegible]





MUSA				NpoR				Rpa																			
52	53	54	55	7	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	
79	80	79	81	4	45	45	80	46	46	46	48	72	81	49	46	47	47	45	81	49	81	51	49	44	46	100	
47	47	47	48	9	46	45	47	73	73	71	70	42	48	71	69	71	70	70	48	71	47	83	94	59	73	49	
48	46	48	49	1	47	46	48	75	75	73	72	43	49	73	71	73	71	72	49	73	48	85	96	61	75	50	
83	84	83	100	4	48	46	84	47	47	46	45	88	100	46	43	47	44	45	100	46	99	49	49	44	47	81	
77	78	77	82	8	48	47	78	49	49	51	51	80	82	52	48	52	50	50	82	52	82	55	52	48	49	83	
98	99	98	83	3	46	44	99	47	47	47	46	73	83	47	43	48	45	46	83	47	82	49	48	43	47	79	
78	79	78	83	8	48	46	79	49	49	51	51	74	83	52	48	52	50	50	83	52	82	55	52	48	49	83	
48	48	48	48	8	44	44	48	80	80	65	63	41	48	64	60	67	62	64	48	64	47	68	76	58	80	46	
48	48	48	49	3	46	48	48	75	75	66	65	42	49	66	61	66	64	65	49	66	48	74	75	63	75	49	
47	47	47	46	1	48	47	47	66	66	89	99	41	46	100	95	90	98	88	46	100	45	83	73	61	66	49	
85	85	85	85	5	46	46	85	48	48	47	47	77	85	48	45	48	46	46	85	48	85	51	50	45	48	90	
47	47	47	45	2	45	46	47	62	62	80	84	40	45	85	84	81	83	79	45	85	44	77	70	62	62	45	
99	99	99	84	3	46	44	100	47	47	47	46	74	84	47	43	48	45	46	84	47	83	49	48	43	47	80	
44	44	44	44	8	46	45	44	61	61	84	94	40	44	44	95	90	86	93	86	44	95	43	78	69	58	61	45
47	47	47	48	2	50	49	47	65	65	88	89	42	48	90	86	89	88	88	48	90	47	89	76	62	65	48	
41	42	41	42	8	47	46	42	57	58	58	58	38	42	59	52	59	57	57	42	59	42	62	57	98	58	42	
41	42	41	42	1	48	49	42	57	58	57	57	38	42	58	52	58	57	57	42	58	42	62	58	91	58	43	
42	43	42	44	0	49	48	43	59	60	60	60	40	44	44	61	54	61	59	44	61	43	64	59	100	60	44	
47	47	47	46	1	48	47	47	66	66	89	99	41	46	100	95	90	98	88	46	100	45	83	73	61	66	49	
48	48	48	49	0	46	45	48	75	74	72	71	43	49	72	71	72	70	72	49	72	48	84	95	60	74	50	
48	48	48	49	1	47	46	48	75	75	73	72	43	49	73	71	73	71	72	49	73	48	85	96	61	75	50	
81	82	81	98	3	47	45	82	46	46	45	44	86	98	45	42	46	43	44	98	45	97	48	48	43	46	79	
49	49	49	48	1	49	49	49	70	70	89	93	43	48	94	89	90	92	88	48	94	47	83	77	61	70	49	
42	43	42	44	0	49	48	43	59	60	60	60	40	44	61	54	61	59	59	44	61	43	64	59	100	60	44	
98	99	98	84	3	46	44	99	47	47	47	46	74	84	47	43	48	45	46	84	47	83	49	48	43	47	80	
42	43	42	44	0	49	48	43	59	60	60	60	40	44	44	61	54	61	59	59	44	61	43	64	59	100	60	44
48	48	48	46	1	48	45	48	60	60	74	80	40	46	80	79	75	79	73	46	80	45	71	68	61	60	48	
42	43	42	44	9	49	48	43	58	59	59	59	40	44	60	53	60	58	58	44	60	43	63	58	99	59	44	
47	47	47	46	1	48	47	47	66	66	89	99	41	46	100	95	90	98	88	46	100	45	83	73	61	66	44	
44	45	44	46	9	48	47	45	59	59	59	59	40	46	60	54	60	58	59	46	60	45	63	58	99	59	46	
42	43	42	42	8	48	49	43	57	57	56	56	36	42	57	52	57	55	56	42	57	41	60	57	88	57	44	
43	44	43	45	0	47	47	44	58	58	58	58	41	45	59	54	59	57	58	45	59	45	62	57	100	58	46	
98	99	98	83	3	46	44	99	47	47	47	46	74	83	47	43	48	45	46	83	47	82	49	48	43	47	79	
47	47	47	48	2	48	45	47	63	63	73	73	42	48	79	78	74	77	73	48	79	47	71	68	72	63	50	
79	80	79	81	4	46	46	80	47	47	47	49	73	81	50	46	48	48	46	81	50	81	51	50	45	47	100	
46	46	48	50	6	47	45	48	73	73	65	65	47	50	66	64	66	64	65	50	66	50	75	74	67	73	51	
47	47	47	46	5	46	43	47	64	64	75	83	41	46	84	83	76	82	74	46	84	45	72	70	59	64	49	
94	95	94	83	4	47	45	95	47	47	48	47	74	83	48	43	49	46	47	83	48	82	50	49	44	47	79	
95	96	95	80	0	43	43	96	43	43	43	42	72	80	43	43	44	43	44	80	43	80	45	44	40	43	78	
83	84	83	100	4	48	46	84	47	47	46	45	98	100	46	43	47	44	45	100	46	99	49	49	44	47	81	

TABLE 6.7

[illegible]

[illegible]

TABLE 6.9

[illegible]

TABLE 6.10

[illegible]

TABLE 6.11

[illegible][illegible]





44	46	84	83	83	44	49	45	83	84	41	Mpl.16
62	82	48	46	46	62	65	83	49	48	42	Mpl.19
43	47	86	100	100	43	46	47	85	86	43	Mpl.21
44	48	86	100	100	44	48	48	85	86	44	Mpl.24
61	96	50	48	48	61	69	97	51	50	45	Mpl.26
44	46	84	83	83	44	48	46	82	84	46	Mpl.28
54	61	44	43	43	54	94	61	47	44	47	Mpl.29
59	65	49	46	46	59	78	65	50	49	48	Mpl.30
60	66	50	47	47	60	79	66	51	50	49	Mpl.31
61	65	46	45	45	61	99	65	48	46	50	Mpl.32
57	78	47	46	46	57	60	79	49	47	51	Mpl.33
42	47	85	99	99	42	46	47	84	85	52	Mpl.35
43	47	86	100	100	43	46	47	85	86	53	Musk.01
42	47	85	99	99	42	46	47	84	85	54	Musk.02
44	46	85	84	84	44	48	46	83	85	55	Musk.06
46	49	80	77	77	46	50	49	78	80	56	NpoR.25
100	60	45	43	43	99	61	61	46	45	57	NpoR.44
49	48	48	46	46	49	45	48	49	48	58	NpoR.53
48	47	46	44	44	48	46	47	48	46	59	NpoR.81
43	47	86	100	100	43	46	47	85	86	60	NpoR.86
59	66	50	47	47	59	78	66	51	50	61	Rse.01
60	66	50	47	47	60	79	66	51	50	62	Rse.02
60	88	48	47	47	60	65	89	49	48	63	Rse.03
60	98	48	46	46	60	65	99	49	48	64	Rse.04
40	41	75	74	74	40	44	41	80	75	65	Rse.07
44	46	85	84	84	44	48	46	83	85	66	Rse.08
61	99	49	47	47	61	66	100	50	49	67	Rse.15
54	94	45	43	43	54	62	95	46	45	68	Rse.16
61	90	49	48	48	61	66	90	50	49	69	Rse.18
59	97	47	45	45	59	64	98	48	47	70	Rse.20
59	88	47	46	46	59	65	88	48	47	71	Rse.21
44	46	85	84	84	44	48	46	83	85	72	Rse.22
61	99	49	47	47	61	66	100	50	49	73	Rse.23
43	45	84	83	83	43	48	45	83	84	74	Rse.24
64	82	51	49	49	63	70	83	52	51	75	Rse.52
59	72	52	48	48	59	73	73	53	52	76	Rse.53
100	60	45	43	43	99	61	61	46	45	77	Rse.58
60	66	50	47	47	60	79	66	51	50	78	Rse.60
44	49	85	80	80	44	48	49	85	85	79	Rse.61
59	65	49	46	46	59	78	65	50	49	80	Rse.63
44	46	85	84	84	44	48	46	83	85	81	her3.1
44	49	85	80	80	44	48	49	85	85	82	her3.10

TABLE 6.14



45	47	100	86	5	47	49	99	100	83	her3.11
65	75	53	49	4	73	76	54	53	84	her3.12
60	72	48	47	0	61	80	49	48	85	her3.16
43	47	86	100	3	46	47	85	86	86	her3.18
61	62	47	46	0	75	62	49	47	87	her3.19
45	47	100	86	5	47	49	99	100	88	her3.22
60	66	50	47	0	79	66	51	50	89	her3.3
100	60	45	43	9	61	61	46	45	90	her3.4
45	47	100	86	5	47	49	99	100	91	her3.7
60	66	50	47	0	79	66	51	50	92	obr.1
43	47	87	99	3	46	47	86	87	93	obr.11
44	43	85	95	4	48	49	83	85	94	obr.12
63	61	49	45	33	66	92	51	49	95	obr.14
60	66	50	47	0	79	66	51	50	96	obr.15
43	47	85	99	43	46	47	84	85	97	obr.16
44	43	85	80	44	48	49	85	85	98	obr.17
44	43	85	80	44	48	49	85	85	99	obr.18
44	43	85	87	44	48	49	85	85	100	obr.19
43	47	85	99	43	46	47	83	85	101	obr.2
43	47	86	99	43	46	47	85	86	102	obr.20
44	47	95	8	44	48	49	85	85	103	obr.21
60	66	50	47	0	79	66	51	50	104	obr.22
61	72	52	47	0	71	73	53	52	105	obr.23
42	46	85	9	42	45	46	83	85	106	obr.24
43	47	86	10	43	46	47	85	86	107	obr.26
-	42	45	43	99	61	61	46	45	108	obr.3
-	42	49	47	0	66	99	50	49	109	obr.4
-	-	-	8	45	47	49	99	100	110	vegf.1
-	-	-	-	43	46	47	85	86	111	vegf.10
-	-	-	-	43	46	47	85	86	112	vegf.2
-	-	-	-	-	61	61	46	45	113	vegf.3
-	-	-	-	-	-	66	49	47	114	vegf.4
-	-	-	-	-	-	-	50	49	115	vegf.5
-	-	-	-	-	-	-	-	99	116	vegf.6
-	-	-	-	-	-	-	-	-	117	vegf.8
100	100	110	1	113	114	115	116	117		Clone
EGF										

TABLE 6.15